ESSENTIAL EVIDENCE PLUS™

Evidence-Based Clinical Decision Support

COCHRANE INSIDE

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WILEY-BLACKWELL

www.essentialevidenceplus.com

HEALTH PROFESSIONALS TRUST
ESSENTIAL EVIDENCE PLUS (EE+) TO HELP:

- Improve patient outcomes
- Inform point-of-care decisions
- Save time and stay organized on the front line
- Stay up to date with the latest evidence

EE+ is a powerful, comprehensive clinical decision support system that integrates information on 9,000 diagnoses into healthcare professionals' clinical workflows. This clinical tool, created by an international team of renowned medical experts, was developed for physicians, nurses, and other healthcare professionals on the front line of patient care.

EE+ features over 13,000 topics, guidelines, abstracts, tools, images, and summaries covering the most common conditions, diseases, and procedures clinicians come in contact with every day. Every recommendation carries a strength-of-evidence rating that accurately grades each recommendation's merit on the basis of all of the evidence available in the relevant literature.

In addition, *EE+* links extensively to abstracts of Cochrane Systematic Reviews, along with the full text of these reviews where a subscription to The Cochrane Library is in place, to ensure that our users always have access to high quality evidence-based healthcare information where it exists.

COCHRANE INSIDE

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Essential Evidence Plus **provides access to diagnostic answers and tools you won't find in any other comparable product.**

- ***Essential Evidence* Topics** — Provide best-evidence answers to the most important clinical questions concerning symptoms, diseases, drugs, and other treatment regimens. Its concise, highly structured content is tightly integrated and hyperlinked to thousands of calculators, articles, Cochrane Systematic Reviews, and evidence summaries within **EE+** to make searching for answers quick and seamless. Each topic has a "strength-of-evidence" rating for every recommendation, a "Bottom Line" summary that introduces each section, and a broad array of algorithms to aid in the decision-making process.

- **POEMs (Patient Oriented Evidence that Matters) Research Summaries** — Daily e-mail alerts and 3,000+ archived POEMs summarize the most recent, relevant research from over 100 journals to help you stay up to date in your practice

- **Decision Support Tools** — 300+ enable you to assess risk and probability, estimate the reliability of a diagnosis and prognosis, calculate a patient's risk for disease, select the safest and most effective drug dosage, and much more

- **Diagnostic Test Calculators** — 1,900+ indicate which tests to order and assist you in interpreting the results

- **History and Physical Exam Calculators** — 1,700+ guide you to the most statistically accurate diagnosis possible based on a patient's history and physical exam findings

- **Cochrane Systematic Reviews** — 3,500+ abstracts of Cochrane Systematic Reviews, the gold standard for evidence-based therapeutics, with links to the full text with a subscription to The Cochrane Library

- **EBM Guidelines** — 1,000+ practice guidelines, 3,000 evidence-graded summaries, 950+ high quality photographs, and audio and videos for some of the most common diseases and procedures

www.essentialevid

■ **Derm Expert Image System** — An interactive expert system to assist you in diagnosing skin problems with 1,000+ high quality photographs

■ **NGC Practice Guidelines** — 1,300+ practice guidelines from major organizations, including the National Guidelines Clearinghouse, for optimal decision making

■ **Drug Safety Alerts** — Within 72 hours of new, serious drug safety concerns or drug withdrawals, the *Essential Evidence* Topics will be updated and an e-mail alerting service will notify users of the latest safety information

■ **Anatomy Illustrations** — Hundreds of anatomy illustrations are included within the *Essential Evidence* Topics

■ **ICD-9 Codes** — A tool to search the most commonly used codes in general medicine

■ **Patient Information** — Link from the *Essential Evidence* Topics to MedLine Plus Health Topics, which covers symptoms, causes, treatment, and prevention for over 800 diseases, illnesses, health conditions, and wellness issues

■ **Free Continuing Medical Education (CME) Credit** — Easily obtain credits for qualified searches

■ **Podcasts** — Tune in each week as Dr. Mark Ebell, EE+ Editor-in-Chief, joins Dr. Michael Wilkes, NPR correspondent and Vice Dean of the UC Davis Medical School, for a brief discussion about an important, recent POEM. The discussion provides additional depth and insight into the issue covered by the POEM synopsis.

STEP ONE: Search for answers

1 **Seamless Searching:** Easy to jump directly to the best medical evidence and refine your search through advanced search features, including term suggestions based on indexed terms, your previous searches, Boolean operators, and multiple search terms

2 **Drug Safety Alerts:** Within 72 hours of new, serious drug safety concerns or drug withdrawals, the *Essential Evidence* Topics will be updated and an e-mail alerting service will notify users of the latest safety information

STEP TWO: Click on the *Essential Evidence* Topic under Top Results

3 **Refine Your Results** by content or resource

STEP THREE: Find your answer

ESSENTIAL EVIDENCE PLUS

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Diabetes mellitus (type 2)

Essential Evidence | 🖨 Printer Friendly | Last Updated on 2009-11-05 | © 2009 John Wiley & Sons, Inc.

Author: **Nina R. O'Connor, MD**, Faculty Physician, Chestnut Hill Hospital, Philadelphia, PA

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OVERALL BOTTOM LINE

- Intensive blood pressure control and lipid lowering, along with smoking cessation, reduce complications and mortality in patients with type 2 diabetes and should be the primary treatment goals. **A**
- Tight glucose control (hemoglobin A1c < 7.0) reduces microvascular complications of questionable clinical significance, but does not improve quality of life or reduce all-cause mortality. **A**
- Metformin lowers all-cause mortality independent of glycemic control; similar mortality benefits have not yet been demonstrated for insulin or the other hypoglycemic agents. **A**
- In type 2 diabetes, self glucose monitoring does not improve hemoglobin A1c levels or reduce complications, but does result in more symptomatic hypoglycemic events. **A**

Interactive Tools

Calculators
- Diabetes mellitus screening
- Stroke risk - diabetics (UKPDS)
- Diabetes risk score

Background | Prevention | Diagnosis | Treatment | Prognosis | Populations | References | **Guidelines** | Evidence | Resources

Background

Jump to...

Diabetes mellitus type 2 is a chronic disease of hyperglycemia due to a progressive insulin secretory defect in the setting of insulin resistance.

Prevalence Back to Top
- For the period 1988-1994, 51 US adults had diabetes for every 1000 persons in the population. Another 69 had impaired glucose tolerance. These estimates are based on data from the Third National Health and Nutrition Examination Survey; the current prevalence is not available, but is likely higher. **4**

Economic Impact Back to Top
- In 1997, the US healthcare system spent $98 billion on medical care and lost productivity for people with type 2 diabetes. **3**

Other Impact Back to Top
- There is a large number of undiagnosed cases; an estimated 3% of the US adult population meets diagnostic criteria for diabetes, but has never been formally diagnosed. **4**

Causes of the Condition Back to Top
- Obesity, inactivity, and genetic factors contribute to insulin resistance and the development of type 2 diabetes.

Pathophysiology Back to Top
- Insulin resistance leads to rising insulin levels.
- Initially, the pancreatic beta cells increase insulin production to overcome insulin resistance and maintain euglycemia. Eventually, beta cells fail and hyperglycemia results.
- Microvascular and macrovascular diseases occur, which may result from hyperglycemia or other metabolic changes.

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4 **Bottom Line:** Highlights the most important findings in each *Essential Evidence* Topic

5 **Strength of Evidence:** Level-of-evidence ratings support each recommendation

6 **Table of Contents:** Embedded tabs and a drop-down menu to help you jump to specific sections quickly, including prevention, diagnosis, treatment, prognosis, evidence, guidelines, references, and more

7 **Print:** *Essential Evidence* Topic summaries and more

8 **Free CME:** Easily obtain continuing education credits for qualified searches

STEP FOUR: Drill down for more information on the topic and use Cochrane Systematic Reviews, interactive calculators, POEMs, and other resources to support your diagnoses and treatment plans

Go Directly to the Evidence: Click on the Evidence tab, which highlights all current POEMs Research Summaries, Cochrane Systematic Reviews, and EBM Guidelines on the topic

Cochrane Inside: Click on the title link to read the The Cochrane Library abstract or link through to the full text review (subscription required)

Discover the Latest Guidelines: Read the latest practice guidelines from the National Guidelines Clearinghouse and other world-renowned organizations

Link to Other EBM Content: Click on the links for dynamic information retrieval

Full Text Links: Under the References tab, click on the link for instant access to the full text article through PubMed (with subscription)

Use the Interactive Tools and Calculators, Algorithms, and Images under the Resources Tab

Interactive Tools and Calculators: Find over 300 interactive decision support tools to assist in your diagnosis and treatment plans and over 3,000 clinical and diagnostic calculators to help you choose and interpret tests

DM (Type I or II) -> Type I DM

Diagnostic Tests   Printer Friendly

Determine the likelihood of a patient having a disease based on the results of a diagnostic test.

Symptom: DM (Type I or II)
Disease: Type I DM

Select a Test:	Sort tests by:
25-Hydroxyvitamin D (blood)	LR+ (LR+)

+ Show test summary   definitions

LR+: 24   Sensitivity: 94%
LR-: 0.06   Specificity: 96%

Pre-test probability (%): 90.0 ▼ ▲ help

PV+: 95.9% probability that the patient has the disease if the test is **positive.**
PV-: 5.7% probability that the patient has the disease if the test is **negative.**

More Info

Open this article in a new tab

Age (years)
◉ <= 45
○ 45 - 64
○ > 64

☑ Female with macrosomic infant
☑ Siblings with diabetes mellitus
☑ Sedentary (little or no exercise during recreation and quite inactive during a usual day
☑ Obese (weight for height >=120% of ideal body wt for medium frame)
☑ Parent with diabetes mellitus

Likelihood of DM: **5.2% (8/154)**   More Info

Images: View the latest dermatology images or anatomy illustrations on the topic

| Background | Prevention | Diagnosis | Treatment | Prognosis | Populations | References | Guidelines | Evidence | Resources |

Related Dermatology Images

acanthosis nigricans	acanthosis nigricans	foot ulcer, diabetic	foot ulcer, diabetic
Photo courtesy of: Richard Usatine, M.D.	Photo courtesy of: Richard Usatine, M.D.	Photo courtesy of: Richard Usatine, M.D.	Photo courtesy of: Richard Usatine, M.D.
View full size	View full size	View full size	View full size
acanthosis nigricans	necrobiosis lipoidica diabeticorum		
Photo courtesy of: Richard Usatine, M.D.	Photo courtesy of: Richard Usatine, M.D.		
View full size	View full size		

IMAGES

Image 1: Diabetes mellitus (type 2): Treatment. Back to Top

All type 2 diabetics:
Smoking cessation
Blood pressure control (< 130/80)
Lipid lowering with a statin (goal LDL < 100)
Metformin (independent of blood sugars, especially if obese)[a]

↓

Strongly consider:
Aspirin (unless contraindicated)[b]
ACE inhibitor (even if normotensive)[c,d]

↓

Additional treatment goals:
Reasonable blood glucose control

Abbreviations: ACE, angiotensin-converting enzyme; LDL, low-density lipoprotein.
[a]{POEM 730}.
[b]{Hovens et al- Cochrane protocol}.
[c]{POEM 20356}.
[d]{Cochrane 6257}.

Summary Tables and Algorithms: Access for at-a-glance information and optimal decision making

REMOTELY ACCESS ESSENTIAL EVIDENCE PLUS TODAY THROUGH YOUR INSTITUTION!

EE+ is web-optimized for mobile devices. It delivers evidence-based clinical decision support to your fingertips for the point of care via your iPhone™, iPad™, iPod Touch®, Android™, Blackberry®, and other Smartphones.

Set up a Personal Profile to get *EE+* on your mobile device at the point of care or anywhere

You must create a Personal Profile from a computer within your institution's IP range.

Step 1: Go to the *Essential Evidence Plus* homepage (www.essentialevidenceplus.com)

Step 2: Click on "My Account" in the top menu

Step 3: Click on "Register" in the "Access Your Personal Profile" box

Step 4: Fill out the "Personal Profile Registration" form

Step 5: View confirmation notice

Once you have established a username and password, *EE+* can be accessed anywhere on your mobile device simply by logging in. If you do not have access to an IP authenticated location, please contact us at **marketing@essentialevidenceplus.com** for setup assistance.

DON'T FORGET!

Add **www.eeplus.mobi** to your favorites or add an icon to your home screen to get instant access at the tap of your finger!

To add an icon to your iPhone home screen:

1. Open Safari, the browser on your iPhone, go to **http://www.eeplus.mobi/m**, and tap on the middle icon at the bottom of the screen, which has an arrow leaving a box

2. Select "Add to home screen"

3. Type in the name you want to use for the icon

4. See the icon appear on your home screen
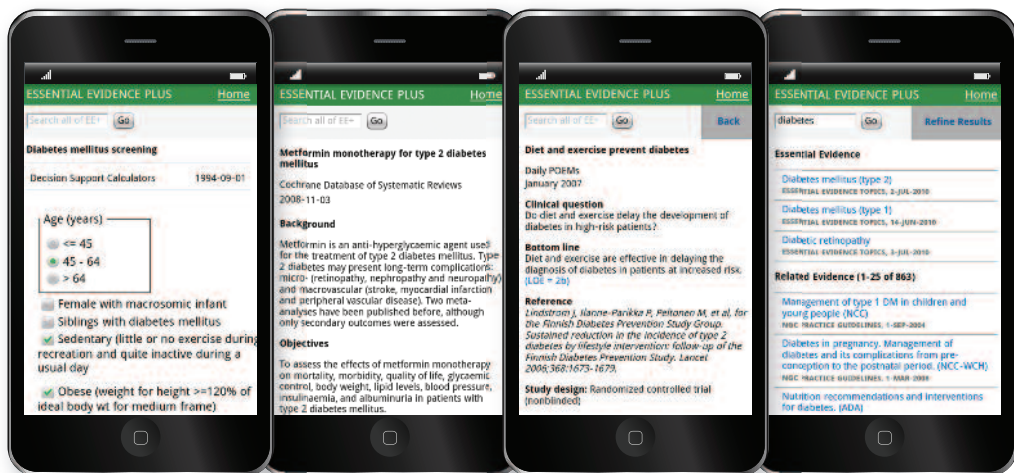
"*Essential Evidence Plus* supports clinicians on the front lines of patient care. It gives practitioners a reliable resource that filters the thousands of articles published every month to provide the most useful information about diagnosis and treatment. Moreover, it provides interactive tools and calculators that bring this data to life and helps clinicians apply it directly to help their patients."

Mark H. Ebell, MD, MS
Professor, University of Georgia
Editor-in-Chief, *Essential Evidence Plus*

ESSENTIAL EVIDENCE PLUS
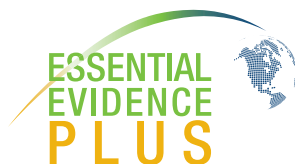
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Call our customer care department: **877-MED-POEM** or **201-748-6645** (option 6) [Monday - Friday, 8AM - 8PM Eastern US]

"*Essential Evidence Plus* has been a valuable tool for me in the office and hospital setting. The information is relevant to the care of my patients, easily accessed, and at times plays a significant role in my clinical decision making, even though I have been in practice for more than twenty years."

George Seifert, MD
Marshall Internal and Family Medicine

"This top-notch resource is an essential part of my patient and teaching practice. I love the regular "POEM" updates in my email inbox!"

Steven Brown, MD
Banner Good Samaritan Family Medicine Residency

"*Essential Evidence Plus* is an extremely useful tool at the point of care. It offers quick, concise, evidence-based answers when you need them...The topics are laid out in an easy-to-read format that allows you to focus on just the information that you really want when the patient is sitting right in front of you in the office. I particularly like the 'Bottom Line' sections that cut to the chase when time is of the essence. It is a great product—one that will soon become a staple for busy, evidence-based clinicians."

Philip A. Bain, MD, FACP
Dean Health System

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